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# NOTICE OF ALLOWANCE AND FEE(S) DUE

25281

7590

03/23/2010

DICKE, BILLIG & CZAJA FIFTH STREET TOWERS 100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402 EXAMINER

YUSHIN, NIKOLAY K

ART UNIT

PAPER NUMBER

2893

DATE MAILED: 03/23/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,798	07/10/2008	Bernd Betz	I431.155.101/FIN 527 PCT/	3901

TITLE OF INVENTION: PROCESS FOR PRODUCING AND APPARATUS FOR IMPROVING THE BONDING BETWEEN A PLASTIC AND A METAL.

APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$0 \$1510 \$1510 06/23/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

## Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

(571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 25281 7590 03/23/2010 Certificate of Mailing or Transmission DICKE, BILLIG & CZAJA I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. FIFTH STREET TOWERS 100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402 (Depositor's name (Signature (Date APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE 10/575,798 07/10/2008 Bernd Betz I431.155.101/FIN 527 PCT/ 3901 TITLE OF INVENTION: PROCESS FOR PRODUCING AND APPARATUS FOR IMPROVING THE BONDING BETWEEN A PLASTIC AND A METAL. APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1510 \$0 \$1510 \$1510 06/23/2010 **EXAMINER** ART UNIT CLASS-SUBCLASS YUSHIN, NIKOLAY K 2893 438-694000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_ (enclose an extra copy of this fo Advance Order - # of Copies \_ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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25281 75	590 03/23/2010		EXAMINER	
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FIFTH STREET TOWERS			ART UNIT	PAPER NUMBER
100 SOUTH FIFTH STREET, SUITE 2250 MINNEAPOLIS, MN 55402			2893 DATE MAILED: 03/23/2010	0

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/575 700	BETZ ET AL.	
Notice of Allowability	ce of Allowability   10/575,798   BETZ ET AL.   Examiner   Art Unit		
	NULCOL ANANGLUM	0000	
	NIKOLAY YUSHIN	2893	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communication is sufficient in the communication in the communication is sufficient in the communication in the	this application. If not including the inclu	ded e course. <b>THIS</b>
1. This communication is responsive to <u>RCE filed 1/14/10</u> .			
2. $\boxtimes$ The allowed claim(s) is/are $\underline{16 - 40 \text{ and } 42}$ .			
3. ☑ Acknowledgment is made of a claim for foreign priority ur  a) ☑ All b) ☐ Some* c) ☐ None of the:  1. ☑ Certified copies of the priority documents have	e been received.	,,	
2. Certified copies of the priority documents have	• • •		
3. Copies of the certified copies of the priority do	cuments have been received	in this national stage applic	ation from the
International Bureau (PCT Rule 17.2(a)).			
* Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the re	equirements
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give			NOTICE OF
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.		
(a) ☐ including changes required by the Notice of Draftspers	on's Patent Drawing Review	( PTO-948) attached	
1) ☐ hereto or 2) ☐ to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or	in the Office action of	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t			e back) of
6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT			Note the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Info	ormal Patent Application	
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	6. 🗌 Interview Su	mmary (PTO-413),	
	Paper No./N	/lail Date	
3. 🗵 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 01/14/2010 and 01/25/2010	/. ∐ Examiner's A	Amendment/Comment	
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's S	Statement of Reasons for All	lowance
of Biological Material	9.		
/NIKOLAY YUSHIN/	5. <u>C. Salor</u>		
Examiner, Art Unit 2893			
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### **DETAILED ACTION**

## Continued Examination under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex Parte Quayle*, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission of IDS filed on 01/25 and 01/14/2010 has been entered.

## Information Disclosure Statement

The information disclosure statements (IDS) submitted on 01/25 and 01/14/2010 comply with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

### Allowable Subject Matter

Claims 16 – 40 and 42 stand allowed.

## **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance:

In re Claim 16, Abbott, US 2004/0183166 discloses all limitation of claim 16 except for "...etching into the surface of the interlayer using the etchant to form a matrix of islands of remaining material of substantially uniform height with voids extending between these islands." The claimed method differs from prior art methods on this point and there is no evidence it would have been obvious to make this change.

In re Claim 23, Abbott discloses all limitations of claim 23 except for "...<u>to form a matrix of islands of remaining material of substantially uniform height with voids extending between these islands..."</u> The claimed method differs from prior art methods on this point and there is no evidence it would have been obvious to make this change.

In re Claim 29, Abbott and Ganesan, US 5,554,569 discloses all limitations of claim 29 except for "...a semiconductor device comprising ... the interlayer having a surface comprising a matrix of islands of remaining material of substantially uniform height with voids extending between these islands." The claimed device differs from prior art devices on this point and there is no evidence it would have been obvious to make this change.

In re Claim 35, Abbott and Ganesan disclose all limitations of claim 35 except for "...a metallic single-piece base body of a leadframe, and at least one interlayer which has been applied to the base body and may comprise one or more individual layers, and the interlayer having a surface comprising a matrix of islands of remaining material of substantially uniform height with voids extending between these islands." The claimed device differs from prior art devices on this point and there is no evidence it would have been obvious to make this change.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

# Comment on Applicant's 371P

Applicant submitted on 04/13/2006 the International Search Report stating that Kazumi, EP 0 533 137 anticipates claims 1 – 15 of PCT/DE/2004/002199 original Application. However,

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claims 1 -15 are cancelled in this Application. In any case, Kazumi does not anticipate the amended (on 09/02/2009) claims 16, 23, 29, and 35, specifically the new limitation such as "...a matrix of islands of remaining material of substantially uniform height with voids extending between these islands..."

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIKOLAY YUSHIN whose telephone number is (571)270-7885. The examiner can normally be reached on Monday through Friday from 8 a.m. to 5 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Davienne Monbleau can be reached on 571-272-1945. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NIKOLAY YUSHIN/ Examiner, Art Unit 2893 /Thomas L Dickey/ Primary Examiner, Art Unit 2826 Application/Control Number: 10/575,798

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